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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/883,341	06/19/2001	Shlomo Orbach	ORBACH4	9649
1444	7590	02/07/2005	EXAMINER	
BROWDY AND NEIMARK, P.L.L.C. 624 NINTH STREET, NW SUITE 300 WASHINGTON, DC 20001-5303			PAYNE, DAVID C	
			ART UNIT	PAPER NUMBER
			2633	

DATE MAILED: 02/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/883,341	<b>Applicant(s)</b> ORBACH ET AL.	
	<b>Examiner</b> David C. Payne	<b>Art Unit</b> 2633	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 2 November 2004.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 and 3-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-6 is/are rejected.
- 7) ☒ Claim(s) 7 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments with respect to claims 1, and 3-6 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claim(s) 1 is/are rejected under 35 U.S.C. 102(b) as being anticipated by Delisle et al. US 5,692,076 (Delisle).

Re claim 1, Delisle disclosed

A grouped Optical Add Drop Multiplexer (GOADM) comprising a periodic filter for dropping or adding a group of optical wavelengths from/to a spectrum of optical wavelengths transmitted over an optical line so that adjacent optical wavelengths in the spectrum are initially spaced from one another by a basic wavelength step "s", wherein

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said periodic filter is inserted in said optical line as a primary filter and is constructed to filter selected wavelengths such that adjacent wavelengths of the group are spaced from one another by a group step being equal to  $ks$ , wherein  $k$  is an integer  $>1$ . (see, e.g., Figure 5, Figure 7, col. /lines: 3/25-33, 4/5-15, 7/17-22, 7/25-30).

4. Claim(s) 1 is/are rejected under 35 U.S.C. 102(e) as being anticipated by Cao US 6,370,296 B1 (Cao).

Re claim 1, Cao disclosed

A grouped Optical Add Drop Multiplexer (GOADM) comprising a periodic filter for dropping or adding a group of optical wavelengths from/to a spectrum of optical wavelengths transmitted over an optical line so that adjacent optical wavelengths in the spectrum are initially spaced from one another by a basic wavelength step " $s$ ", wherein said periodic filter is inserted in said optical line as a primary filter and is constructed to filter selected wavelengths such that adjacent wavelengths of the group are spaced from one another by a group step being equal to  $ks$ , wherein  $k$  is an integer  $>1$ . (see, e.g., Figure 4, col. /lines: 4/50-67, 8/5-15, ).

5. Claims 1 and 3 are rejected under 35 U.S.C. 102(e) as being anticipated by Cao US 6,263,126 B1 (Cao2).

Re claim 1, Cao2 disclosed

A grouped Optical Add Drop Multiplexer (GOADM) comprising a periodic filter for dropping or adding a group of optical wavelengths from/to a spectrum of optical wavelengths transmitted over an optical line so that adjacent optical wavelengths in the spectrum are initially spaced from one another by a basic wavelength step " $s$ ", wherein

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said periodic filter is inserted in said optical line as a primary filter and is constructed to filter selected wavelengths such that adjacent wavelengths of the group are spaced from one another by a group step being equal to  $ks$ , wherein  $k$  is an integer  $>1$ . (see, e.g., Figure 6, Figure 11, col. /lines: 4/39-65, 6/59-67).

Re claim 3, Cao2 disclosed

provided with one or more secondary filters (stages) connected to said periodic filter serving as a primary filter, wherein each of said secondary filters is responsible of dropping or adding one particular wavelength from said group. (see e.g., 5/20-47).

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cao US 6,263,126 B1 (Cao2) in view of Hutchison et al. US 6,687,463 (Hutchison).

Re claim 4,

Cao2 disclosed an ADD module and a DROP module (Fig. 11), wherein the DROP module

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comprises a first said periodic filter serving as a primary DROP periodic filter (Figure 11). Cao2 does not disclose said first periodic filter connected to a first assembly comprising at least one secondary DROP filters each responsible for separating a particular wavelength from the group, and wherein the ADD module comprises a second said periodic filter serving as a primary ADD periodic filter and connected to a second assembly comprising at least one secondary ADD filters each responsible for picking a particular wavelength for the group. Hutchison disclosed

Hutchison disclosed an ADD module and a DROP module, wherein the DROP module comprises a first said periodic filter (52) serving as a primary DROP periodic filter and connected to a first assembly comprising at least one secondary DROP filters (60, 62, 64) each responsible for separating a particular wavelength from the group, and wherein the ADD module comprises a second said periodic filter (56) serving as a primary ADD periodic filter and connected to a second assembly comprising at least one secondary ADD filters (66, 68, 70) each responsible for picking a particular wavelength for the group. It would have been obvious to one of ordinary skill in the art at the time of invention to form a cascade arrangement of ADD/DROP modules in the Cao2 arrangement as does Hutchison to modularize the frequency separation and ease filter requirements as was described in Cao2 col. 5/40-47).

Re claim 5,

the modified invention of Cao2 and Hutchison does not disclose that the first periodic filter (52) and second periodic filter (56) are one and the same enabling simultaneous operation of said two modules. However, it would have been obvious to one of ordinary skill in the art the time of invention to integrated to two filters as the same device can perform adding and dropping in different directions since WDM light does not interfere

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with one another. Furthermore, lacking any criticality it is not patentable over the prior art to make parts integral.

8. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cao US 6,263,126 B1 (Cao2) in view of Bailey et al. US 6,633,695 B2 (Bailey).

Cao2 disclosed the aforementioned invention but does not disclose where the primary filter is tunable. Bailey disclosed the use of tunable grating filters (see Figure 1). It would have been obvious to one of ordinary skill in the art at the time of invention to use the tunable Bailey grating filters in the Cao optical add drop multiplexer so that reconfiguration of the network can be accomplished without removing and inserting ADMs (see Bailey col./line: 2/5-15).

#### ***Allowable Subject Matter***

9. Claim 7 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Conclusion***

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David C. Payne whose telephone number is (571) 272-3024. The examiner can normally be reached on M-F, 7a-4p.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on (571) 272-3022. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dcp

*David C. Ryan*  
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